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*The Corps.*

# Environment

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## Conference focuses on sustainability

By LAWRENCE REILLY  
*Detroit District*

Building relationships among Great Lakes stakeholders while focusing on a balanced dialogue between the environmental and economic issues that are vital to the future of the Great Lakes was the focus of a two-day conference sponsored by the Detroit District and the Great Lakes Commission in late June.

"Moving Toward a Sustainable Great Lakes" was conducted June 25 and 26 at the Lake Superior State University in Sault Ste. Marie, Mich.

"We're looking forward to a bi-nationally recognized speaking group that will cover topics of economic, environmental and social significance," said Jeff Weiser, Detroit District's coordinator for the conference. "We are expecting exciting outcomes from our presentations, panel discussions, partner display reception and networking opportunities."

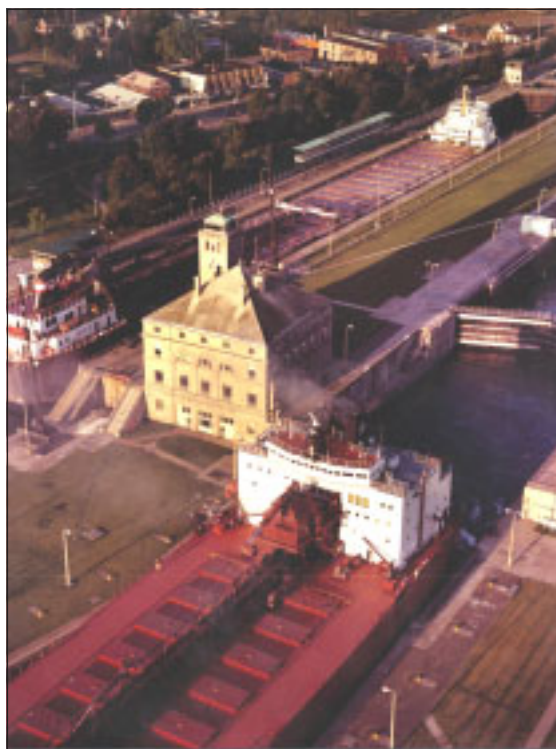
The importance of building strong relationships among Great Lakes stakeholders didn't go unnoticed by firms outside the U.S. Army Corps of Engineers as many big name environmental and ecology agencies and firms both federal and private have jumped on board.

"We have a great mix of government agencies and non-governmental groups participating, to include such agencies as the American Great Lakes Ports Association; Chippewa Ottawa Resource Authority; Michigan Department of Environmental Quality; National Oceanic and Atmospheric Administration; National Wildlife Federation; The Nature Conservancy; U.S. Coast Guard; U.S. Environmental Protection Agency and the U.S. Fish and Wildlife Service," said Weiser.

The conference sponsors wanted to ensure all agencies associated with the Great Lakes were invited so when invitations were sent out, they were also sent to Canadian agencies.

"The Consulate General of Canada is the lead agency for the Canadian participation," Weiser said. "We are expecting the deputy prime minister, the president of the Chamber of Maritime Commerce, and the director of the Ontario Region of Environment."

The major topics of discussion at the conference included Great Lakes restoration planning, transportation infrastructure to sustain our economy, waterfront redevelopment, sustainable borders, water quality/quantity,



U.S. Army photo

and Great Lakes biodiversity -- an issue of stewardship and recreational issues in the Great Lakes.

"These topics were chosen to create an open dialogue on the integration of environmental, social and economic issues in the Great Lakes Basin and to bring together a wide variety of groups to build relationships," said Weiser.

More than a dozen guest speakers were scheduled to participate in the conference including Maj. Gen. Robert Griffin, the U.S. Army Corps of Engineers' director of Civil Works, and Chicago Mayor Richard Daley.

"We believe this will become an annual conference to continue to build relationships and to deal with continuing and new Great Lakes sustainability issues," said Weiser.

The conference was part of a variety of events set for the Soo Locks during the week of June 22-28.

### *INSIDE*

2

Northern exposure;  
Earth Day

3

Storm damage  
reduction

4

Bridge returns home  
in its dotage

5

Pontoon excavator;  
Earth Day awards

6

Wildflowers;  
Maintenance  
dredging underway

7

Environmental  
awards; Wastewater  
project

8

Environment  
workshop

9

Improved manage-  
ment system

10

Environmental  
management;  
Environmental  
principles

11

Recycling tank  
tracks

12

Wetland Mitigation  
Study

13

Erosion problems

14

Innovative  
technology

15

Invasive plants; New  
partnership



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# Good sleeping bag, warm clothing, MREs make temporary assignment bearable

Flying in on little planes, landing on snow or icy waters of the Bering Sea, and then riding on the back of a snowmobile or four-wheel all-terrain vehicle with the cold wind and snow blowing in your face are the

only ways to visit native villages in the far northwest of Alaska.

That's how Richard L. Pike, quality assurance specialist (ammunition surveillance) of the Ordnance and Explosives Directorate, U.S. Army Engineering and Support Center, Huntsville, made his way on temporary duty around seven different Alaskan villages for 10 days in April.

Pike was conducting quality assurance on the contractor, TechLaw Inc., hired by the Corps to visit and gather information for the Closed, Transferred and Transferring Range Inventory of Army National Guard units in Alaska.

On the five-person TechLaw team, Pike was the only government employee.

From the base camp in Nome, Pike traveled to the villages of Savoonga and Gambell on Saint Lawrence Island and the village of Wales on the mainland. After the base camp was transferred to Bethel, he traveled to Saint Marys and Mountain Village.

The TechLaw Inc. research team interviewed former members of the Alaska Territorial Guard and mem-



U.S. Army photo

**Richard Pike**

bers and former members of the Alaska Army National Guard from the separate villages.

Between visits to the various sites the team often had to wait for hours for the weather to clear to fly

out to a site.

"The team finally got into Savoonga one morning expecting to fly out again in the afternoon to Gambell, but because of fog, had to spend the night in Savoonga only to find that the next day Gambell was still fogged in.

"The team had to fly back to Nome, spend the night, and finally fly out to Gambell that afternoon after spending hours in the Nome air terminal. This really affected our scheduling," said Pike.

"It was cold going but we had good sleeping bags and appropriate clothing. The MREs (Meals-Ready-to-Eat) I brought along really came in handy out in the remote villages," said Pike. "It was exciting when we stopped off between Little Diomede Island and Big Diomede Island, after leaving Wales to go back to Nome. There is a small village on the American island of Little Diomede and Big Diomede that belongs to Russia. We landed on the ice of the Bering Sea between the two islands and one of our party said he saw through his binoculars a couple of Russian soldiers in their

white uniforms on the top of Big Diomede."

"It was very interesting listening to the elder Alaska native men tell of some of their experiences while in the ATG," related Pike. "These men are very serious and proud of the service they provided, especially during the Cold War era.

"One older gentleman we tried to talk to was so serious about the present war in Iraq going on that he was determined not to talk to us in the event he might say something inappropriate. Even after showing him a Corps of Engineers ID card and retired Army ID card, he was still afraid to talk."

When flying into a remote Eskimo village the team had to wait in the cold until someone came to the airstrip to pick them up. There were no terminal buildings.

Someone would quickly show up and they had to ride back to the village on the back of a snowmobile, ATV, or on a sled. Once they reached the village they didn't know what the sleeping arrangements would be, a room with a bed or a space on the floor. Pike said that he had to sleep on the floor using his sleeping bag only twice.

In the village of Saint Marys, the team was treated to a potluck spaghetti dinner and about three hours of local tribal dancing.

"All in all, the visits were a huge success," said Pike. "The teams gathered a lot of valuable range information from the interviews."

*Editor's note: Pike retired from the Huntsville Center in May.*

## **Diverse groups join to celebrate Earth Day**

The Louisville District hosted an Earth Day celebration at the Ronald Mazzoli Federal Building on April 22.

Information on the award-winning Green River Conservancy Partnership, the world's largest bio-remediation facility, at Joliet Army Ammunition Plant and the biological field-truthing study pioneered by the award-winning environmental team of Ravenna Army Ammunition Plant were on display in the lobby.

Information, tree seedlings, free posters and other give-

away items were distributed by the Corps and other participating organizations including TARC; Ticket to Ride Vanpool, Riversweep, Louisville Nature Center, Sierra Club, USDA Natural Resource Conservation Service, U.S. Environmental Protection Agency Region 4, Kentucky Power Cooperative and General Services Administration.

Uncle Sam's Place, a childcare center, shared in the fun by singing songs about recycling and dressing in costumes with an environmental theme.

# District proposes coastal storm reduction plan for MDC Reservation at Nantasket Beach

By TIMOTHY DUGAN  
*New England District*

The New England District conducted a feasibility investigation to examine coastal storm damage reduction alternatives for the Metropolitan District Commission Reservation at Nantasket Beach in Hull, Mass., and is now recommending a plan.

"The study for the coastal storm damage reduction project was conducted to examine solutions to storm damage and flooding at the Nantasket Beach MDC Reservation and backshore properties in the town of Hull," said David Larsen, of the Corps of Engineers, New England District, Engineering/Planning Division.

During coastal storms, considerable damages can be sustained by these properties from flooding, wind and wave action. This study was completed to identify and evaluate alternative plans that would reduce or eliminate these damages.

"The proposed project for the Nantasket Beach MDC Reservation would provide protection along about 5,400 feet of shoreline along Nantasket Beach by sand nourishment," Larsen said. In addition, as a separate non-Federal action, the MDC intends to provide sand nourishment on about 1,400 feet of their Nantasket Beach Reservation north of the federal project area.

Also, as a separate project, the MDC proposes to repair the existing seawall at the MDC Reservation. Sand nourishment and the seawall repair will be completed in different phases, but as close to each other as possible.

Storm waves and winds pose a potential flood hazard to the MDC facilities and commercial development in the backshore. The project would provide protection for the seawall and reduce the risk of flooding in this area.

The recommended federal project is construction of a minimum 50-foot wide sand fill beach seaward of the 5,400-foot long seawall, raised to an elevation of 12 feet National Geodetic Vertical Datum, sloping to the existing beach at a maximum slope of 1 foot on vertical to 15 feet horizontal and renourishment to periodically restore the geo-



Photo provided by Dave Larsen

**The New England District is proposing a recommended plan for coastal storm damage reductions at Nantasket Beach.**

metric configuration and level of protection of the plan.

"In our environmental review, it is the most technically and economically feasible, environmentally and culturally acceptable project for reducing storm damages from flooding and erosion at Nantasket Beach," Larsen said.

The Corps accepted public comments in the proposed alternative through April 12.

The plan was developed with consideration of the overall public interest, including engineering and economic feasibility and environmental, cultural, and social effects.

"It is the best implementable alternative to meet the objectives of the investigation," Larsen said.

Sources of sand are being investigated for this project including land-based sources and aquatic sources.

The feasibility investigation was conducted under the authority of Section 103 of the 1962 River and Harbor Act, as amended. No work will be performed until certification has been received from the Massachusetts Department of Environmental Protection, as required under Section 401 of the Clean Water Act of 1977.

The proposed work is being coordinated with the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. National Marine Fisheries Service, the Massachusetts Department of Environmental Protection – Division of Water Pollution Control, Division of Marine Fisheries and Division of Wetlands and Waterways, the Massachusetts Executive Office of Environmental Affairs – Coastal Zone Management Office and Massachusetts Environmental Policy Office, the Massachusetts Historical Commission, the Hull Conservation Commission, and the Federal Emergency Management Agency.

An Environmental Assessment and Finding of No Significant Impact have been prepared for the project. Impacts to the area are expected to be minor and temporary.

No impacts to threatened, endangered, or rare species are expected. Also, no cultural resource impacts have been identified in the project area.

"Construction work will not be done on the beach when shellfish and other benthic organisms are spawning that could potentially be affected by the proposed work in the year funds are available," Larsen said.



# Bridge returns home in its dotage

By JOANNE CASTAGNA  
New York District

The Doty Road Bridge has carried vehicles over New Jersey's Ramapo River for more than a century.

The New York District recently found a home for the retired landmark in Phoenixville, Penn., where it was originally constructed and will continue to serve the public.

Doty Bridge was named after the Doty family, early settlers to Oakland Borough in Bergen County, N.J. The single-lane, 80-foot long bridge was constructed in 1891 and spanned the Ramapo River in an area traditionally called The Ponds.

Bergen County needed a new bridge after winter floods swept away the bridge that stood before it in the late 19<sup>th</sup> century. The county purchased the bridge, a five-panel, wrought iron, Pratt Pony Truss Bridge with Phoenix Columns, from the Phoenixville Bridge Company, a wholly owned subsidiary of the Phoenix Iron and Steel Company, located in Phoenixville.

Bergen County chose the bridge by thumbing through a catalog. The Phoenixville Bridge Company sold hundreds of bridges, viaducts, and highway spans in the United States and Canada through their firm's trade catalogue.

Whole bridges were pre-fabricated by the company in an almost kit-like fashion. The customers ordered the parts they needed. The parts were shipped to local engineers who customized the designs for their particular location. All of the bridge panel sections were sent to the job site with all of the riveting work completed. The only thing that local engineers had to do was pin the bridge together.

Many of the bridges were constructed using the bridge company's famous Phoenix Columns and truss designs, invented by the company. The Phoenix Column is hollow and circular and made up of four, six, or eight wrought-iron segments that are flanged and riveted together forming a column.

Phoenix Column truss bridges were widely used in the late 1800's because the column facilitated the erection of tall structures eliminating the requirement for heavy, thick load-bearing walls and also because of its application to the construction of bridges, viaducts and elevated rail lines.

In 1983, the bridge was condemned because of its poor condition and another bridge was inserted through the middle of the original structure relieving the old bridge from carrying any traffic. In 1989 the structure was determined eligible for listing in the National Register of Historic Places.

The Doty Road Bridge is located where the New York District's Oakland Flood Control Project is currently under construction. Several years ago project managers determined that the bridge would be an obstruction during floods and that it should be removed. The State of New Jersey Preservation Office stated that something needed to be done with the bridge because it is a cultural resource.

Lynn Rakos, a New York District archeolo-



U.S. Army photo

**The Doty Road Bridge will continue to serve the public in its new home across French Creek in Phoenixville, Penn.**

gist, took the lead in finding a home for the bridge, particularly its trusses, because the rest of the bridge was deteriorated.

"Our goal was to provide it to a non-profit at no charge and to make sure it would still be accessible to the public," Rakos said.

Rakos marketed the trusses nationwide. She called historical societies, distributed fliers and marketing materials to state park managers and engineers, and placed an advertisement in *Preservation Magazine*. She received emails and calls from a wide range of people.

"Engineering professors, interested in the bridge's history, told me that they would like a piece of the truss and another man wanted to place it by a stream on his ranch in North Dakota," said Rakos.

After several years of work on locating a home for the bridge, she received a call from the Phoenixville Area Economic Development Corporation (PAEDCO), a non-profit organization that is trying to bring economic life into Phoenixville. The New York District, after evaluating all of its offers decided to work with PAEDCO.

PAEDCO, in cooperation with the county and state, purchased 27 acres in northern Phoenixville to create a park. The plans for the park include creating walking and biking trails along French Creek and placing the trusses of the bridge over the creek connecting the park to the trails. On a rainy, cold day the bridge was disassembled and trucked from Oakland Borough, N.J., to Phoenixville, where it was crafted over a century ago.

"We sent the bridge home in its dotage," said Rakos.



U.S. Army photo

**The disassembled Doty Road Bridge is transported from New Jersey to its new home in Pennsylvania.**

# Pontoon excavator helps Craney remain vital

By NANCY E. ALLEN  
*Norfolk District*

A new piece of equipment is extending the useful life of the Craney Island Dredged Material Management Area, operated by the Norfolk District in Portsmouth, Va.

The Corps staff has invested in a pontoon excavator to better manage the facility.

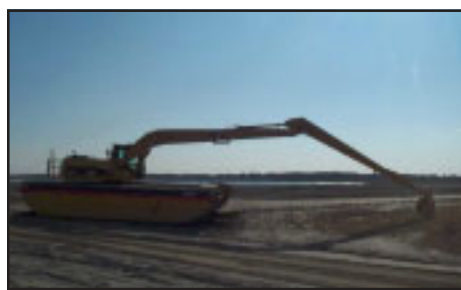
Craney Island, in operation since 1957, is a long-term disposal area for dredged material from the channel and ports in the Hampton Roads, Va., area. Commercial, agricultural and industrial development in the area, along with the movement of naval vessels, is dependent upon maintaining project depths in the channels. Craney Island facilities are used by all private interests, municipalities and government agencies that dredge in the Norfolk Harbor and adjacent waters.

Between three and five million cubic yards of dredged material are pumped into one of three cells at Craney Island each year. One cell is active, receiving dredged material from a large pump, and two cells are drying at any given time.

The goal is to remove the water from the cells as quickly as possible to facilitate drying time and lengthen the life of all the cells.

The water and good material is ditched from the active cell by a system of spillways, specially designed weirs and a traditional excavator; however, these methods still leave material and water in the middle of the cell.

"The pontoon excavator can float in as little as four feet of water and is used to excavate dredged material in the previously



**A new pontoon excavator moves dredged material at the Craney Island Dredged Material Management Area in Portsmouth, Va.**

Photo by Nancy E. Allen

inaccessible areas of the cell," said Denny Copperthite, manager of the Craney Island facility. "This excavator has been used recently to try and find new areas of recoverable sand and material located in the center of the cells."

Given the concern about recent outbreaks of West Nile Virus, the pontoon excavator provides a public health benefit as well as an economic one. The equipment helps reduce the standing water in the cells, which can become a breeding ground for mosquitoes.

The removed material is used to build up roads and levies around the facility. The process of dredging, ditching and building up the roadways and levies is a year-round cycle for the staff. They are always searching for new and innovative ways to manage Craney Island and extend its useful life.

The Craney Island facility is a major benefit to the Hampton Roads maritime community, which boasts the second largest port on the East Coast. The facility, which totals

2,500 acres, has a lifespan of 25 to 50 more years, depending on how it is monitored and maintained.

Stringent specifications that maintain the purity of the water that is pumped back into the Elizabeth River and the output is tested on a regular basis. In some portions of the cells, wetland plants help act as a filter for the water.

The Craney Island facility also includes a rehandling basin, which accepts dredged material that will not be pumped into the cells because it is bottom dumped or off-loaded from scows. A contractor dredges this basin on a regular basis. The re-handling basin and dock area is occasionally used by local military for training and is also available for contractors to dock during inclement weather.

Craney Island is also home to many migratory birds, including least turns and the endangered piping plovers. A professor from the College of William and Mary supervises the nesting area located in the facility. Fishermen and other recreational users visit the nationally renowned bird-watching spot.

This year the staff has added purple martin birdhouses. A purple martin can eat as many as 2,000 mosquitoes a day and might prove to be a natural solution to lowering the mosquito population.

By using effective management techniques such as the newly purchased pontoon excavation, the Craney Island Dredged Material Management Area will continue to be a vital operation of the Norfolk District.

## Environmental Commission bestows Earth Day award

*Louisville District provides financial, technical assistance to Nature Conservancy, National Park Service*

The Kentucky Environmental Quality Commission honored Mike Turner, chief of Economics and Environmental Resources, Louisville District, and Richie Kessler, Green River Bioreserve director, The Nature Conservancy, with a 2003 Earth Day Award in April.

The two led a cooperative effort between TNC and the Louisville District to initiate a three-year experiment modifying water releases from Green River Lake. This improved passage of water through the dam to more closely mimic naturally occurring downstream flows, without the reservoir, while retaining full flood control benefits.

The first cost-shared project between the Corps and TNC was jointly managed by Kessler and Turner to complete the Handy Riparian Habitat Restoration Project on Green River in Green County. The project

eliminated a high eroding bank caused by 32 years of operation of Green River Lake and protected and restored two miles of riparian forest corridor along the river.

The Conservation Reserve Enhancement Program gained acceptance by local landowners in the Green River Bioreserve through the efforts of Kessler. Turner enabled the Corps to give both financial and technical assistance to National Park Service efforts to preserve and restore native mollusks in the Green River and to improve natural flows within Mammoth Cave National Park.



# Wildflowers brighten Lake Cumberland

By **TROY HAWKS**  
*Nashville District*

Warm March breezes, the unmistakable sound of upland chorus frogs, and multi-colored early wildflowers signify the rebirth of spring.

Lengthening days and warm sunshine make Nashville District's Lake Cumberland a popular spot for viewing wildflowers.

As days grow longer, these spring jewels increase in number and their populations become more diverse.

Lake Cumberland is rich in native floral species. Our first wildflowers appear in early March, and include early saxifrage, hepatica, spring beauty, and ginger. Their showy petals are mostly short lived, and soon melt away with late-arriving snows. As the first messengers of spring begin to fade, new varieties take their place. A wildflower walk at the end of March yields completely new species of flora from those present early in the month, or what will be present at the end of April.

This is a premium time of year to search for flowering plants. Mid-spring varieties include: bloodroot, Dutchman's beeches, twinleaf, trillium, bluets, Virginia bluebells, trout



**Yellow Trout Lily**



**Blood Root**



**Hepatica**



**Ginger**



**Bluebell**

lily and more than I can possibly list here.

Searching for these spring jewels is an inexpensive sport. Hikers need only comfortable, durable shoes and clothing suitable for either short or lengthy hikes, a hat, and a small backpack with drinking water, sunscreen, insect repellent, camera, and a wildflower guidebook. Two popular volumes are: *Wildflowers and Ferns of Kentucky and*

*Wildflowers of Mammoth Cave National Park*. Both address plants found in Tennessee and Kentucky.

The best place to find wildflowers this time of year is along the north face of steep hillsides not far from shady stream banks.

As an amateur botanist, one of the things I most admire about wildflowers is their insistence on change. The variety of

colors and shapes are truly amazing. After a long winter, these colorful messengers of spring are truly a blessing.

To discover the many types of wildflowers blooming in your area, check your gear, pack up your family, and visit your local woodlands, or your state and federal public lands. And if you are too late to plan a trip this year, put it on your calendar for 2004.

Photos by Troy Hawks

## District begins work on Providence River, Harbor dredging project

By **TIMOTHY DUGAN**  
*New England District*

The long-anticipated removal of 6 million tons of debris within the Providence River and Harbor in Rhode Island started quietly on April 12 when massive dredges lifted the first of many cubic yards of material from the silted-in federal navigation channel.

The contractor, Great Lakes Dredge and Dock Company, of Oak Brook, Ill., mobilized to Narragansett Bay on April 11 and worked 24 hours a day to dredge Rumstick Reach within seven days.

The project involves dredging of the au-

thorized federal navigation channel in the Providence River. Shoaling has reduced depths in the channel by more than eight feet in places creating draft restrictions and significant time delays for deep-draft vessels using the project. The project involves dredging a seven-mile stretch of the authorized federal navigation project to full authorized dimensions — 40 feet deep and 600 feet wide.

Work will take 18 months to complete, according to Project Manager Ed O'Donnell, New England District. The \$43 million contract was awarded in December 2002. The total state cost share in the project is about

\$7.4 million.

About 1.5 million cubic yards of material will be placed in confined aquatic disposal cells.

"We continue to work with the state to beneficially use about 215,000 cubic yards of clean sandy material from the CAD cell excavation as fill at Fields Point for Johnson and Wales University," O'Donnell said.

The remainder of the maintenance material and suitable CAD cell material will be placed at an offshore disposal site in Rhode Island Sound.

For more information, call the New England District Public Affairs Office at (978) 318-8264.

# It's a three-peat for DoD Team

By ANGELA DICKSON

*Engineer Research and Development Center*

A Department of Defense team including three Engineer Research and Development Center researchers has received three major environmental awards, the White House Closing the Circle Award, the Secretary of the Army Environmental Award for Pollution Prevention, and the Secretary of Defense Pollution Prevention Team Award.

The 44-member multi-agency pollution prevention team worked to achieve a positive balance between defense readiness and environmental stewardship at military installations. The team included three ERDC employees from the Construction Engineering Research Laboratory, Robert Lacey, Annette Stumpf, and Michelle Hanson.

The team, consisting of personnel from Forces Command, Office of the Director for Environmental Programs, Army Environmental Policy Institute, Army Environmental Center, and six installations, conceived the Installation Sustainability Program, which re-focused the pollution planning process to specifically tie mission requirements to environmental issues.

The program uses education, outreach, process improvement, and partnering to engage the environmental and Army communities in pollution prevention planning and imple-



Michelle Hanson



Robert Lacey



Annette Stumpf

U.S. Army photos

mentation.

"The 25-year sustainability goals set by the installations are really impressive and will change the impact installations have on the environment in the future," said Stumpf, a researcher at CERL.

For example, one goal set at Fort Lewis, Wash., includes 100 percent energy from renewable sources and 100 percent on-site generation of electricity by 2025. Achieving these ambitious goals involves multiple interacting efforts, such as designing sustainable buildings and seeking alternative energy systems.

The benefits to the Army from this effort include enhanced military readiness, increased well being of soldiers and families, mutually beneficial relationships with local communities and regulatory agencies, better strategic planning at installations, and

overall, a healthier environment.

Judging panel member T.J. Granito, program manager for the U.S. Coast Guard's Environmental Management Division, called the ISP "one of the best examples of comprehensive forward thinking in the environmental field in years."

"This team has taken the lead in not only looking beyond pollution prevention, but initiating steps to ensure that environmental management is or will be incorporated into all aspects of future missions."

"It inspires others to take action," Stumpf said of the real importance behind winning the awards. "This team has set many installations on the course of changing the way they look at everything, and we are hoping to carry this effort to the rest of the Army installations."

## Corps, city work together to clean up wastewater

By SHANNON BAUER

*St. Paul District*

The U.S. Army Corps of Engineers, St. Paul District, and the city of Aitkin, Minn., signed a project cooperation agreement in March to begin building a reed bed facility that will help clean up the city's biosolids.

Currently, Aitkin's wastewater is treated in clay-lined lagoons located only a few hundred feet from the Mississippi River.

The city has received a Notice of Violation from the Minnesota Pollution Control Agency for excessive seepage from the lagoons

into the river. To bring the lagoons into compliance with state requirements, the Corps of Engineers will help the city construct a reed bed facility. This is a natural way to reduce the number of biosolids in the city's wastewater.

A reed bed system is similar to a conventional sand drying bed; however, reeds, unlike sand, reduce the amount of biosolids. The reeds need a lot of water, so they extend their roots into the biosolids. The microorganisms in the root system also feed upon the organics in the biosolids.

To build the reed bed, the city will need to excavate the site, con-

struct foots and walls, place granular fill in the bed and plant the reeds. Construction will take about 18 months.

The project will cost \$300,000. The Corps of Engineers will supply \$200,000, and the city will pay the rest. Corps projects such as this one are authorized and funded under the Northeastern Minnesota Section 569 of the Water Resources Development Act of 1999.

The objective of the program, initiated by Rep. James L. Oberstar (D-Minn.), is to provide design and construction assistance to non-federal public interests for car-

rying out water-related environmental infrastructure and resource projects in the 17 counties of northeastern Minnesota's 8<sup>th</sup> Congressional District.

"The Aitkin Project PCA was developed by Terry Engel, who retired shortly before it was signed. Aitkin was one of many projects Terry worked on," said Roland Hamborg, project manager. "Terry was given the task of managing the Section 569 Program at its inception. He developed it into a program that has received many accolades from local communities, other state and federal agencies and Congressman Oberstar."



# Chief of Engineers challenges Corps: Continue work on sustainable development

By CANDY WALTERS  
HQ USACE

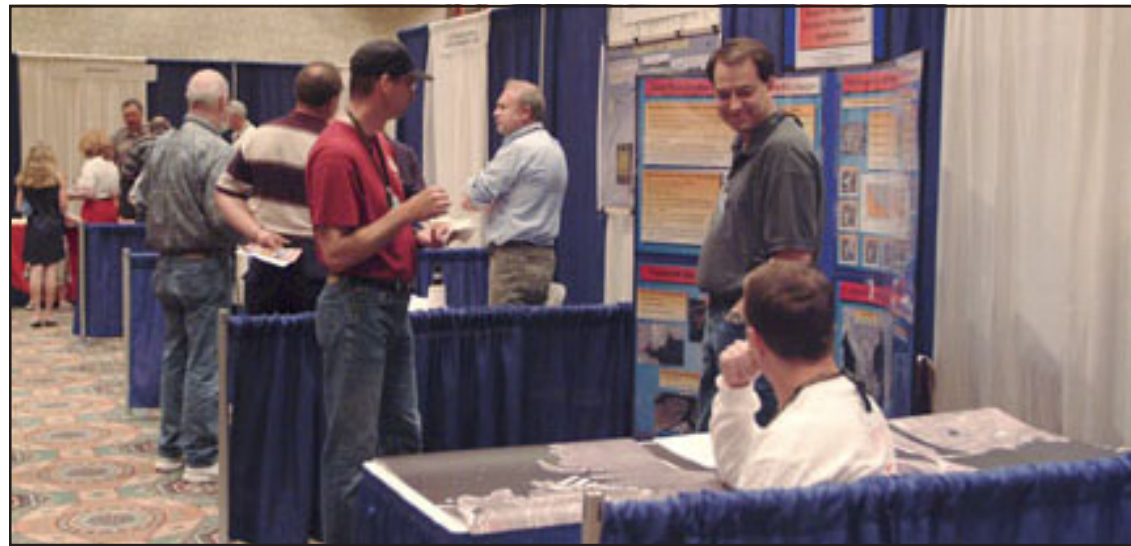
FORT WORTH, Texas -- Chief of Engineers Lt. Gen. Robert Flowers stood before participants at the U.S. Army Corps of Engineers Environmental Development Workshop in Portland, Ore., in April 2001 to challenge the environmental and natural resources community to develop a set of environmental operating principles to guide the Corps in all its work.

Two years later, the same group, 450 strong, came together in Fort Worth, Texas, April 28 through May 1 at the USACE Environment and Natural Resources Conference to see how those principles, unveiled in March 2002, had changed the way the Corps does business.

With more than 130 presentations and papers presented, the conference focused on sharing information on how the principles are being put into action in the environmental and natural resources arenas. It could be viewed as an opportunity to sow the seeds that had been planted at the earlier conference and to plan for the next conference two years from now where the participants will harvest the success of their efforts.

For the Chief of Engineers, his remarks at the April 29 plenary session were a challenge for the Corps to keep heading on the journey toward sustainable development and to reassure them that the Environmental Operating Principles would not fade away once his tenure as chief ends.

"We've begun a journey toward sustainable development. There's



Visitors line up as exhibitors man their displays at the Environment and Natural Resources Conference.

no way we're going to turn back," Flowers said.

"I had been told that our agency did not care about the environment and that bothered me because I knew better. These principles bring forth an important part of the Corps' culture — environmental stewardship," he said, adding that that they are "square in the middle of our processes and very important in achieving our vision."

"We no longer have to choose between economics and environ-

ment — we can have both," he said. "I've heard concerns from some that we're becoming too green too fast. That's OK. It has to become part of our culture. The more people we engage, the more informed we'll be and the better decisions we'll make."

The Chief said he was pleased to see the Corps moving away from a single focus process and adopting a watershed approach, which he said "bodes well for the future." He also said he is "extremely proud of

the role research and development plays in the environment.

"We're defining 'what does right look like' when it comes to implementing the principles," he said. The focus now has to be on changing policy and doctrine that do not conform to the principles and developing metrics because "if you're not keeping score, you're just practicing."

Flowers said he expects the next Chief of Engineers to continue the Corps on its journey toward environmental sustainability.

"I don't see any way this organization can turn back from these principles now that they've been adopted, no way," he said. "We're doing things now to institutional-

ize them through wide dissemination and by adopting the environmental management systems that will help us develop metrics. I see the momentum starting to build.

"We're aligned for success on environmental issues, and we're pretty close to being there already."

But that doesn't mean the work is finished. In his remarks to conference attendees on April 30, David Carruth, an Arkansas attorney and a member of the National Board of the National Wildlife Federation, called the year-old principles a good first step.

"I was quite amazed at the depth, breadth and scope of the principles. They went much farther than I expected. I was really impressed with the document," he said.

However, even with the principles, Carruth said, the Corps still has to learn how to integrate them into studies and its daily ways of doing business if it is going to become "a national and international leader in environmental stewardship."

To illustrate his point, Carruth displayed a Corps project study he had just received that despite its date of April 2003 did not include any discussion of the principles and a section on environmental restoration appeared to be an "add on" rather than part of the actual study.

"That's unacceptable," he said. "Your credibility goes out the window. You have to have a holistic ap-

proach and implement these principles from the get go."

That's not to say that the Corps lacks the ability to do what's right in the area of environmental sustainability.

"The National Wildlife Federation believes that in the 21<sup>st</sup> century the Corps of Engineers could and should become the nation's premier aquatic ecosystem restoration and protection agency," he said.

But to do that, the Corps has to, and has already begun to, make changes, Carruth said. There are environmentally destructive projects on the books, he said, that the "Corps would handle very differently today if they were starting from scratch. It takes effort to make a super tanker move, as General Flowers said the other day. Each of you has to do your job for the Corps to turn that tanker."

"You have to believe the Corps' future is in environmental restoration and make it happen."

And the Environmental Oper-

ating Principles can help, he said. "We fundamentally believe that full and complete integration of these principles in past, present and future project operation and planning is crucial to the Corps fulfilling the leadership role it is now poised to assume. We are as equally concerned that a failure to integrate these principles could lead to a loss of public confidence in the Corps' work and mission," he said.

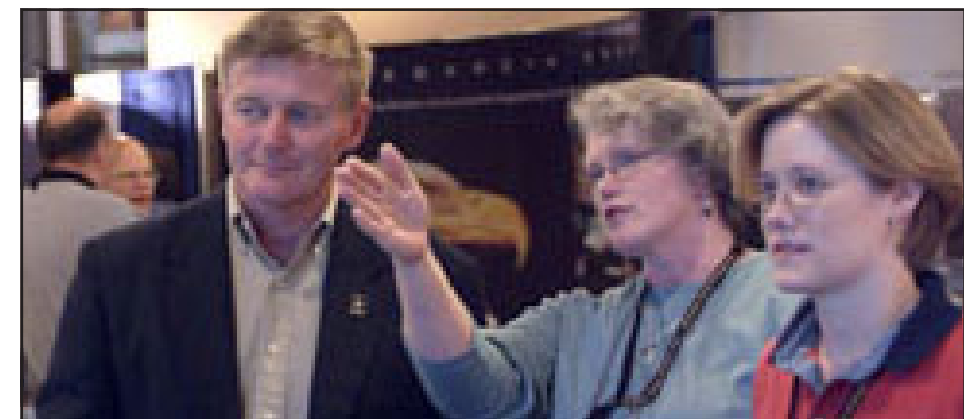
"The Corps of Engineers is now committed to making changes, and I've seen fantastic changes in

the past two years," Carruth said, adding that the challenge is to make it continue by implementing the principles and improving water resources management and development for the 21<sup>st</sup> century and beyond.

Presentations from the conference, including those by Flowers and Carruth, can be found at <http://hq.environment.usace.army.mil/enr2003/usaceenrconf03-rv5-public.ppt> and [http://hq.environment.usace.army.mil/enr2003/carruth\\_nwf\\_eopconferencespeech.doc](http://hq.environment.usace.army.mil/enr2003/carruth_nwf_eopconferencespeech.doc).

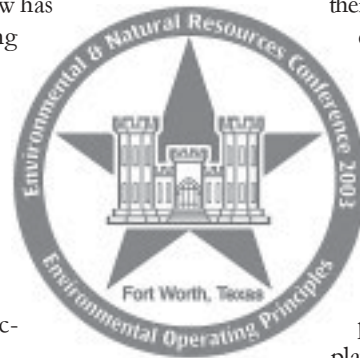


Southwestern Division's Jerry Penland, left, and Bob Stockbower pause for a discussion.



Chief of Engineers Lt. Gen. Robert Flowers, left to right, Bonnie Bryson, and Ginny Dickerson examine an exhibit at the U.S. Army Corps of Engineers Environmental and Natural Resources Conference in Fort Worth, Texas.

Photos by Randal Vanderveer





# New system integrates environmental management

By CANDY WALTERS  
HQ USACE

FORT WORTH, Texas -- An improved management system is on the horizon for the U.S. Army Corps of Engineers and although the name may give the impression that it's only related to the environment, the implications are much broader.

That's the message that Janice Smith, Chief of the Environmental Compliance Section of the Civil Works Directorate, brought to the more than 450 Corps employees attending the Environmental and Natural Resources Conference here April 28 through May 1.

"The Environmental Management System (EMS) is a systematic approach to management that builds on and uses existing programs and processes," Smith said. "It integrates environmental management into all missions and business processes."

Because of its name, some people may think that it applies only to environmental compliance and is a guarantee of optimal environmental outcomes, but in reality it's an overall management system, she said.

By embracing EMS, added Nathaniel Peters, project engineer with the Louisville District Environmental Engineering Branch, the Corps will be one step further in accomplishing one of the Corps' main goals -- "One agile team, capable of

operating virtually as a learning organization."

What EMS does is build upon the Environmental Operating Principles the Corps adopted a year ago.

"It's a means for turning our stated principles and associated doctrine into actions. With EMS, we can walk-the-talk of the EOPS," Smith said.

EMS will help improve environmental awareness, involvement and competency across the entire organization by integrating environmental considerations into all missions.

"We're not reinventing processes here, we're building upon them," she said. "On the military side of the house, installations have been directed to implement EMS.

"On the civil works side, it's a path to making our facilities more sustainable. In our support to others programs, EMS will enable us to provide sustained support to other agencies.

"EMS enhances all our missions and all of our operations," she said. But, she added, making it work will require both leadership support and teamwork.

Adopting Environmental Management Systems is required by Presidential Executive Order 13148, Department of Defense, Department of Army and Corps policies. Chief of Engineers Lt. Gen. Robert Flowers signed an EMS commander's policy memorandum on May 19 establishing EMS within the Corps.

In that memo, the Chief of Engineers stated

that the USACE environmental management systems will be based on the International Organization of Standardization framework, ISO 14001. Because USACE already has programs and systems in place that fulfill many elements of an ISO 14001 EMS, these existing capabilities will continue to be used.

Nathaniel Peters of Louisville District noted that districts will need to work with their customers in developing Environmental Management Systems.

"We have to get educated on EMS, follow the 'plan-do-check-act' cycle spelled out in the EMS specification and then help show our customers how to implement their systems," he said.

"EMS will save money in the long run and will make environmental management everybody's business," Peters said.

"With the implementation of EMS in addition to adopting the Environmental Operating Principles, the Corps is going to continue to be a federal agency leader in the environmental arena," Smith said.

Corps employees can expect to see EMS implementation guidance and a step-by-step implementation guide in the near future. More information on EMS can be found on the Internet at: <https://www.denix.osd.mil/denix/Public/Library/EMS/ssarmy.html> and [www.epa.gov/ems/](http://www.epa.gov/ems/)

## Field workshops focus on Environmental Operating Principles

By CANDY WALTERS  
HQ USACE

FORT WORTH, Texas -- Figuring out the best way to integrate the Environmental Operating Principles into day-to-day decision-making by members of the Corps of Engineers is a challenging proposition.

It also was the focus of three EOP Field Workshops conducted by the Headquarters Engineering and Construction Division this year.

The workshops, held in Fort Worth, St. Louis and Atlanta, brought together more than 75 Corps members from all divisions, districts, centers and labs focused on putting together action plans to describe how best to integrate the principles into all the Corps' work.

"We're all members of the environmental choir," said Mike Klosterman, Headquarters USACE chief geologist, speaking at the USACE Environmental and Natural Resources Confer-

ence on May 1. "We need to be singing on key and on the same sheet of music."

The workshops' goal was to have the participants help produce that "sheet of music." They took the task to heart, producing more than 150 pages of comments and 118 action plans.

The comments on incorporating the principles fell into seven categories: cultural change; sustainability; training; guidance and criteria; research and development; incorporating the HTRW/OE communities; and miscellaneous.

By reviewing the categories, the groups came up with a number of short-term and long-term strategies, Klosterman said.

Short-term strategies call for developing an EOP checklist, incorporating EOP training in all courses the Corps offers, updating guidance, and ensuring that all project delivery teams have environmental members, he said.

Among the long-term strategies are developing metrics to measure success, a common theme

in each category, he said, as well as developing strategies to demonstrate life-cycle cost savings and benefits and developing tools for gathering and quantifying life-cycle costs and probabilities.

"We're looking for EOP champions at all different levels throughout the Corps as we seek to incorporate EOPs into our Individual Performance Objectives and Standards," he said.

"We already have successes out there that incorporate synergy and sustainability into one design rather than settle for an environmental add-on. It's something we're already doing," he said. "With the adoption of the Environmental Management System, we're taking another step. The EOPs are our vision and the EMS is one tool we will use to integrate and implement the EOPs.

"The next step is to turn the results from these workshops into implementable actions in the field," he said.

For more information on the workshops, e-mail Michael.J.Klosterman@usace.army.mil.

# Recycling tank tracks aids erosion control

*Research lab completes technical bulletin summarizing lessons learned, cost-effectiveness, several case studies*

By GWYN HOWARD  
*Construction Engineering  
Research Laboratory*

The Army is committed to improving recycling programs by considering novel approaches for reuse of materials on site.

Efforts are being made to conserve raw materials, find innovative reuses for products, and divert components from the solid waste stream.

Finding alternative uses for waste materials like tank tracks is one tactic to add to the suite of methods already employed. The potential uses for tank

tracks are substantial and can provide an abundance of benefits including reduced volumes of solid waste for disposal, hardened sites for training, and erosion control structures that are robust.

Being creative by employing the recycling hierarchy can add up to large savings and good stewardship of resources.

Although recycling is not a 100 percent solution to diverting solid waste from landfills, it is an essential component of any installation's solid waste management program.

The Corps' Construction

Engineering Research Laboratory has completed a Public Works Technical Bulletin, PWTB 200-1-16, that discusses the alternative reuses of M1 tank tracks for erosion control practices.

This bulletin summarizes lessons learned, cost-effectiveness, and several case studies.

Lessons Learned include a discussion regarding Return On Investment associated with implementing conventional erosion control practices vs. reusing materials, a review of good business practices to follow for communicating with all stakeholders and subject matter experts to ensure success of a project, a summary of the do's and don'ts associated with reusing unconventional materials for erosion control and examples of successful projects and step-by-step implementation.

The information in the

PWTB is helpful to installations trying to find ways to stretch their DPW and ITAM dollars for controlling erosion.

Additionally, it's a good alternative for those installations looking to improve their solid waste program to meet the DOD Measure of Merit for solid waste: a 40 percent diversion from landfills by 2005.

PWTB 200-1-16, as well as many other aids and guides in various technical areas, is now available on the Corps of Engineering and Support Center, Huntsville Techninfo website at [www.hnd.usace.army.mil/techninfo/CPW/pwtb.htm](http://www.hnd.usace.army.mil/techninfo/CPW/pwtb.htm).

The HQUSACE proponent for this PWTB is Malcolm E. McLeod, CEMP-RI, [Malcolm.e.mcleod@usace.army.mil](mailto:Malcolm.e.mcleod@usace.army.mil).

Further technical information can be obtained by contacting the U.S. Army Construction Engineering Research Laboratory Public Affairs Office at (217) 373-6714.



U.S. Army photos

Before and after photos of eroded Army land that was repaired using recycled M1 tank tracks.



# New England summit reviews Wetland Mitigation Study

By ANN MARIE HARVIE  
New England District

The U.S. Army Corps of Engineers has never claimed to be perfect, but the Corps strives for perfection by looking at their programs, involving their customers and trying to find ways to improve. The New England District wetland mitigation program is one example of the Corps' quest for perfection.

The district participated in a mitigation summit on April 3, the second in a series of meetings designed to improve wetland mitigation in New England.

Wetland mitigation is a strategy devised to preserve, restore, enhance or create wetlands to compensate for the impact of development on the environment.

Last year, when the district's Regulatory Division wanted to improve wetland mitigation on the permits it issues, they convened a Mitigation Summit and developed a mitigation task force to get comments and ideas.

Both these meetings involved representatives from all the state and federal environmental agencies. The task force was a working group of scientists given a specific task – to help the district develop a way to assess the success of mitigation in New England and to try to bring agency executive awareness to the topic.

The summit brought together agency executives to present the idea of the mitigation study and to develop a collective consciousness on wetland mitigation in New England.

"The Summit last year brought together all New England states and federal agencies to address issues for improving wetland mitigation in New England," said Lt. Col. Brian Green, deputy district engineer. It also began a dialogue at the executive level aimed at improving our knowledge about and implementation of wetland mitigation.

The 2002 Summit resulted in the Regulatory Division conducting a year-long study of wetland mitigation at 60 sites. Regulatory and the New England Interstate Water Pollution Control Commission held the second Mitigation Summit to discuss the results of that study and other issues related to mitigation at

the EPA offices in Chelmsford, Mass.

"As you will hear, there are problems we observed, but there are also success," said Green.

Paul Minkin, one of New England District's senior wetland scientists, briefed the results of 2002 Corps Wetland Mitigation Study.

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*'I want to emphasize the Corps' commitment to continuing our work on evaluating and improving wetland mitigation...'*

Lt. Col. Brian Green  
New England District

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"The study measures success in two ways," he said. "Does it comply with permit conditions? And does the site function as a wetland that replaces functions lost from impacted areas?"

The scientist discussed how he and Ruth Ladd, another senior wetland scientist, and the Mitigation Task Force developed the study and selected the 60 sites for evaluation. Wetlands were randomly selected, but represented each of the six New England states. Sites had to be larger than 0.10 acre and constructed before 2001. The scientists looked at creation and restoration sites only. Field methods of data collection and the potential for long-term monitoring followed the site selection discussion.

Minkin highlighted 10 of the 60 sites used in the study during his presentation, and explained what went well and what went not so well with the wetland mitigation at these sites.

Minkin compared New England Mitigation to the 2000 NRC Study on Wetlands in his briefing. That study was somewhat critical of the Corps of Engineers mitigation across the country and, although the NRC study did not examine any sites in New England, successes were only marginally better than the rest of the country. New England District has a much better track record for project completion than the rest of the country but the science is still evolving and wetland creation takes more time than we are often willing to acknowledge.

He concluded the presentation by discussing

the next steps the Regulatory Division feels it needs to take in order to improve wetland mitigation. These include continuing to improve data management; striving for no overall net loss of function; and continuing evaluation of mitigation to gauge progress.

"We will continue to monitor these sites and to implement the improvements that the study has shown are in the best interest of wetland mitigation in New England," said Christine Godfrey, chief, Regulatory Division. "We would like to get your input on how we should improve."

Continuing with the summit, Matt Schweisberg, senior ecologist from the Environmental Protection Agency, discussed Regulatory Guidance Letter 02-2, Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 dated Dec. 24, 2002. Schweisberg made comments on key portions of the 16-page letter, authored by the Corps of Engineers in cooperation with the Environmental Protection Agency.

Following lunch, the wetlands work group and mitigation task force members participated in a two-hour work session. During the session Lori Sommer, mitigation specialist for NHDES made a presentation on New Hampshire's Draft Mitigation Regulations. Ruth Ladd discussed the Massachusetts Mitigation Checklist.

The Mitigation Summit concluded with an hour-long discussion of next steps and opportunities for standardization.

"I want to emphasize the Corps' commitment to continuing our work on evaluating and improving wetland mitigation as well as our commitment to implementing the improvements that we have identified and discussed," said Green. "We see this as one in a series of meetings on this topic as we work together towards the common goal of improving wetland mitigation in New England."

The 2002 Corps Mitigation Study is online at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) and the Regulatory Guidance Letter 02-2 can be viewed at [www.usace.army.mil/inet/functions/cw/cecwo/reg/RGL2-02.pdf](http://www.usace.army.mil/inet/functions/cw/cecwo/reg/RGL2-02.pdf).

# Charleston District assists with erosion along Hunting Island State Park road

By ALICIA GREGORY  
*Charleston District*

Charleston District had a mission to save one of the primary access roads at Hunting Island State Park, one of the most popular state parks in South Carolina.

"We were already doing a Section 206 study to investigate shoreline protection opportunities for the park, when we were asked to investigate erosion problems along Cabin Road," said Jim Whiteman, project manager.

Section 206 is the Aquatic Ecosystem Restoration authority under the Corps' Continuing Authorities Program (CAP).

Hunting Island State Park is one the state's most visited parks. More than one million people visit each year, but the island is vulnerable to severe erosion. It loses an estimated 15 feet of sand each year. Roads, cabins, bathhouses, and trees all have been lost to the tides, and Cabin Road was expected to be next.

Working with the project's sponsor, the South Carolina Department of Parks, Recreation and Tourism, the district embarked on finding a way to protect Cabin Road.

Initial planning and design analysis was conducted under CAP Section 14 authority, Emergency Streambank and Shoreline Protection.

"The project delivery team looked at several alternatives when designing the project," said Whiteman. Some of the different alternatives were creating an armor-stone retaining wall, creating a sea wall, placing geotubes (tubes made of geotextile fabric filled with sand) along the road's shoreline, or creating a sand berm.

"The state's Beachfront Management Plan influences the type of action we can take on coastal projects," said Whiteman. "Cabin Road existed prior to this act being passed into law, so several of the restrictions didn't apply.

"We had to be sensitive to those regulations, though, as well as the interests of the resource agencies that we regularly work with."

The decision was made to construct a sand berm because it was determined to be the least costly alternative with the most benefit, according to Whitman. The project consists of constructing a protective berm along an approximately 2,500-foot-section of Cabin Road.

After construction completion, the protective



Photo courtesy of South Carolina Department of Parks, Recreation and Tourism

**Coastal erosion from strong tides makes protecting Cabin Road from this type of damage crucial.**

berm will contain approximately 228,000 yards of sand, and its top width will be approximately 130 feet.

The fact that the project was relatively small made it difficult to get a contractor to bid on the project within the government estimate. Prospective contractors still had some of the same costs, like mobilization, to work on this project as they incur on a large project. The borrow area for the fill material is also located in the unprotected Fripps Inlet, which created more risk to the contractors.

The project also had to be reclassified.

"We thought we could do the project under our Section 14 authority," said Whiteman. "After we realized that all the funding for that program was exhausted for FY02, the project was re-authorized under the CAP Section 103 authority, Shoreline Protection."

While the project was being advertised and negotiated for construction award, a section of the road suffered major damage as unusually high tides from Tropical Storm Kyle washed away a portion of the pavement. The road provides the only access to the south end of the island and the two dozen state and privately owned cabins located there.

Whiteman went out to the site to assess the damage and discuss a plan of action with SCPRT park representatives.

"I maintained constant communication with the sponsor," said Whiteman. "We advised them on the requirement to repair the road, and that they needed to continue to protect the road until the project started. Our partnership has been critical to the process."

The U.S. Army Corps of Engineers, Charleston District, awarded the \$2.4 million contract to Marinex Construction Co., Inc., of Charleston, S.C., in November. Work on the project began in January, and was completed approximately two months later.

The project was a cooperative effort between the Corps and SCPRT. The state contributed about \$920,000 toward the shoreline protection project as part of a cost-share agreement.

"Without the sponsor's interest and the active commitment and support of the PDT to solve the problems and achieve the goals of this study, this project would not have been realized," said Whiteman.

"The protection of Hunting Island State Park and the continued public use of its beach front has been our top priority," said John Durst, director of SCPRT. "Thanks to this action by the Army Corps of Engineers, we can promise this wonderful resource will still be enjoyed for years to come."

*For more information contact the Charleston District Public Affairs Office at 843-329-8123.*



# Corps' Innovative Technology Advocates busy in 2003

By **JEFF BRECKENRIDGE**  
*HTRW Center of Expertise*

The U.S. Army Corps of Engineers Innovative Technology Program was formally established in 2000 by ER 200-1-1, Policy and General Requirements for the Environmental Innovative Technology Program.

In support of this policy, Innovative Technology Advocates have been identified at the Hazardous, Toxic and Radioactive Waste Center of Expertise, 18 District offices, Waterways Experiment Station, and the Huntsville Engineering and Support Center. The ITA mission is to inform, encourage, promote, and support the use and development of innovative technology for environmental investigation and remediation. The ITAs collaborate nationally to facilitate the transfer of innovative technology information between potential technology users and developers. Contact information for District ITAs is available at [www.environmental.usace.army.mil/](http://www.environmental.usace.army.mil/)

[info/technical/it/it.html](http://info/technical/it/it.html). In 2003, the ITAs have been focusing their efforts in three areas: the Triad Approach, Perchlorates, and Explosives Residues.

The Triad Approach is a streamlined process utilizing systematic planning, on-site analytical methods, and dynamic work plans for quality site characterization and remediation. Members of the Corps ITA Triad team have assisted EPA with delivering several Triad training sessions at conferences and through the EPA internet seminar series. In addition, exportable training modules were developed for experienced Triad proponents to train District technical staff, project managers, customers, and regulators. The general goal of these efforts is to increase awareness through training and guidance, engage more Triad advocates, support Triad use on sites, and document Triad case studies.

Perchlorate is a relatively new contaminant of concern that has many rapidly evolving policy and technical issues associated with it. A team of

ITAs from the HTRW CX, OE CX, Districts, and ERDC has been assembled to support perchlorate issues associated with FUDS. An Internal FUDS Perchlorate Website has been established at <https://hqi.environmental.usace.army.mil/programs/fuds/fuds.html> to provide current information such as fact sheets, HQ Directives, DOD/Army policy for District Staff working FUDS.

ITAs are also focusing on innovative technologies for the characterization and treatment of explosives residual chemical contamination (various explosive compounds) in soil and groundwater resulting from numerous ordnance and explosives manufacturing, washout, storage, handling, disposal, and training activities. The ITAs are assembling information on a Explosives Residues website that is intended to assist Corps technical people in making decisions in regard to sampling and analysis and remediation on a variety of explosives residue contaminated sites.

## DSMOA realignment supports strategic vision

By **KELLIE KACHEK**  
*HTRW Center of Expertise*

The U.S. Army Corps of Engineers is undertaking several initiatives to improve the Defense and State Memorandum of Agreement (DSMOA) Program that it manages.

The biggest initiative has been a change in the physical location of the program execution from the Corps Headquarters in Washington, D.C., to its Hazardous, Toxic and Radioactive Waste Center of Expertise (HTRW CX) in Omaha, Neb.

With the change, made in February, Headquarters continues to provide overall leadership, oversight and component liaison functions while the HTRW CX has assigned DSMOA State/Territory Managers to execute the program and coordinate with the states.

"This reassignment of the execution function to the HTRW CX not only aligns the DSMOA Program with our corporate Project Management Business Process, but should result in more timely support to the states/territories, reduce our operating costs, and continue to support the DoD components by maintaining the program management in the D.C. area," said Ken Gregg, Branch Chief, Policy and Requirements, Environmental Division, Military Programs Directorate, Headquarters.

The DSMO program, authorized in 1986, expedites environmental restoration of active and formerly used DoD installations through partnerships with states and territories. These partnerships promote cooperation in cleaning up Environmental Restoration projects funded by either the Defense Environmental Restoration Program (DERP) or the Base Realignment and Closure (BRAC) Program. A Cooperative Agreement issued to each participating state or territory ensures that

DERP or BRAC funding can be used to help defray the state or territory's cost of performing its regulatory duties. These agreements help the military service components achieve closure of environmental restoration projects as efficiently and expeditiously as possible, in a manner that is protective to human health and the environment.

DoD components in the DSMOA program include Army, Air Force, Navy, Defense Logistics Agency, Defense Energy Support Center, and Formerly Used Defense Sites (FUDS). Currently 46 states, three territories, and the District of Columbia participate in the DSMOA Program.

In addition to managing the Cooperative Agreements and serving as the POC for States/Territories, the HTRW CX is working in several other areas to improve the DSMOA program. One of the first tasks is to automate the DSMOA process by establishing a financial database that will more efficiently execute and manage the program. Other automation efforts being explored include electronic payment requests for the states/territories, a payment tracking system, DSMOA collaborative work area, submission of DSMOA required forms, and retrieval of military component and state/territory specific information.

The HTRW CX is also actively participating in this year's nationwide DSMOA Training effort, and will assist in the DSMOA National Workshop in 2004. Numerous other streamlining and pilot initiatives are being proposed to further improve the DSMOA program. By maintaining a military component focus at HQUSACE and a state/territory focus at the HTRW CX, USACE ensures independent oversight and quality assurance in the program.

To learn more about the DSMOA Program and the role of the HTRW CX, visit <https://www.denix.osd.mil/denix/State/DSMOA/dsmoa.html> or contact Kellie Kachek, DSMOA Program Support Manager, at 402-697-2630 or [kellieann.fkachek@usace.army.mil](mailto:kellieann.fkachek@usace.army.mil).

# Some plants create challenges on military lands

By HEIDI R. HOWARD

*Construction Engineering Research Laboratory*

The Army is committed to improving and maintaining optimal training lands for soldiers by conservation of natural resources.

Non-native invasive plant species are a conservation and compliance challenge for cultural and natural resources management on military lands.

Successful natural resource management is critical to the Army mission, as it represents the primary means of sustaining the carrying capacity of testing and training lands.

Invasion of NNIPS can lead to violations of the Endangered Species Act, Clean Water Act, Clean Air Act, Sykes Act, National Historic Preservation Act, as well as Army regulations and memoranda. In addition, NNIPS negatively impact military operations, reduce military carrying capacity, compromise long-term sustainability of training lands, diminish training realism, and restrict training land availability.

Without immediate and aggressive action targeted at identifying, mapping, monitoring, and controlling NNIPS on Army training lands, the magnitude of these negative impacts will increase significantly.

Funded by HQUSACE, the U.S. Army



U.S. Army photos

**Siam weed (*Chromolaena odorata*) seeds remain in the air filter, left, and cooling system, right, of a military armored personnel carrier after washing.**

Corps of Engineers Construction Engineering Research Laboratory has completed two Public Works Technical Bulletins, PWTB 200-1-18 and PWTB 200-1-19, that discuss issues faced by Army land managers. Both documents were developed to increase awareness of NNIPS on military training lands and provide information and guidance, not policy, for the control and management of NNIPS.

The information within the two bulletins is helpful to installations seeking a basic understanding of non-native invasive plant species that may be found within their region. Both documents provide a comprehensive list of non-native invasive plant species for terrestrial non-aquatic areas that were derived from state, county, and federal lists and expert opinions.

Also included are basic overviews of the con-

trol, prevention, and monitoring of NNIPS that have proven successful. PWTB 200-1-18 "Guidance For Non-Native Invasive Plant Species on Army Lands: Western United States" and 200-1-19 "Guidance For Non-Native Invasive Plant Species on Army Lands: Eastern United States," as well as many other aids and guides in various technical areas, are now available on the U.S. Army Engineering and Support Center, Huntsville Techinfo Website at: [www.hnd.usace.army.mil/techinfo/CPW/pwtb.htm](http://www.hnd.usace.army.mil/techinfo/CPW/pwtb.htm).

The HQUSCE proponent for this bulletin is Malcolm E. McLeod, CEMP-RI, [malcolm.e.mcleod@usace.army.mil](mailto:malcolm.e.mcleod@usace.army.mil).

Further technical information can be obtained by contacting the U.S. Army Construction Engineering Research Laboratory Public Affairs Office at (217) 373-6714.

## Corps, interstate council sign partnership agreement

The U.S. Army Corps of Engineers signed a partnership agreement with the Interstate Technology and Regulatory Council in May

ITRC, a state-led coalition that works with industry and stakeholders to achieve regulatory acceptance of environmental technologies, consists of 40 states, the District of Columbia, multiple federal partners, industry participants, and other stakeholders working cooperatively to break down barriers and reduce compliance costs, making it easier to use new technologies.

The council develops guidance and training courses aimed at multi-state acceptance and provides permits for innovative technologies.

"This partnering agreement formalizes an ongoing relationship with the Corps that has proven critical to the success of ITRC," said Rick Tomlinson, ITRC program director.

The Corps expects that the agreement will make it easier for Corps personnel to take advantage of ITRC training opportunities, said Patricia Rivers, chief, USACE Military Programs Environmental Division.

"The Corps looks forward to continued participation on ITRC technical teams and working with ITRC and states to implement

the use of innovative technology on USACE projects," she added.

Other Corps signers to the partnership agreement included Don Basham, chief, Engineering and Construction Division, Civil Works, and Michael O'Connor, director of Research and Development.

The ITRC website, [www.itrcweb.org](http://www.itrcweb.org), offers several different areas where information and opportunities about the partnership can be found.

The "Guidance Documents" section offers information on small arms firing ranges, alternative landfill technologies, unexploded ordnance, diffusion samplers and other technologies applicable to military installations and provides practical guidance to both USACE and state regulators on technology selection and permits.

"Internet-Based Training" and "Classroom Training" offer free technical training on the use of ITRC documents.

USACE members also can "Participate on ITRC Technical Teams." Each January, ITRC opens membership on its technical teams, offering the opportunity to develop new technical documents and training.

For more information, contact Jeff Breckenridge at the HTRW CX at (402) 697-2577 or e-mail [Jeff.L.Breckenridge@nwd02.usace.army.mil](mailto:Jeff.L.Breckenridge@nwd02.usace.army.mil).



# Public expresses mixed feelings at Greenbush

By ANN MARIE HARVIE  
*New England District*

Environment, noise, and safety concerns dominated testimony given during public hearings for the Massachusetts Bay Transportation Authority's application for the construction of the Greenbush Old Colony Railroad commuter line in Hingham, Mass., April 15.

Two hearings, hosted by the New England District in the afternoon and evening, were held at the Hingham Town Hall and drew a crowd of more than 275 people.

The MBTA requested a Corps permit to place fill material in 7.81 acres of wetlands and waterways for the construction of the commuter line.

Construction of the commuter rail will include installing approximately 18 miles of rail line, seven new commuter rail stations and an end of the line layover facility. The line would go through the towns of Braintree, Weymouth, Hingham, Cohasset, and Scituate, Mass.

"Our role in this permit process is defined by Section 404 of the Clean Water Act, by Section 10 of the Rivers and Harbors Act, and as required by Section 106 of the National Historic Preservation Act," said Lt. Col. Brian Green, Deputy District Engineer, who served as hearing officer for the two hearings. "I'd like to emphasize that this is your hearing and we need you to assist us in this public review process."

"The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity in the public interest," said Permit Manager Theodore Lento. "That decision will reflect

the national concern for both protection and utilization of important resources."

No decision on issuing the permit will be made until the environmental assessment is complete, said Lento.

Andrew Brennan, director of Environmental Affairs for the MBTA, followed Green and briefed the attendees on the permit application. Following procedural remarks by Larry Rosenberg, chief, public affairs, the audience was given the opportunity to present their comments both for and against the project.

"Sound levels from the proposed restored train as measured by the MBTA will significantly interfere with sound levels and music in the church as well as speech sound levels for reading during meals in the refectory," wrote the Benedictine monks of Glastonbury Abbey in Hingham. "We request that the MBTA be required to respond adequately to these environmental, safety and procedural issues as a condition of any permits issued by the Corps of Engineers."

Catherine Rein of Hingham appealed to the Corps to consider the safety issues of the project.

"You are engineers. You may or may not care about the aesthetics of my 300-year-old house," she said. "But can you sleep if you allow a design that entices children to look both ways, see no cars coming, and cross the train tracks to their death?"

The proposed project would impact essential fish habitat for smelt, herring and alewife.

The habitat consists of tidally influenced streams including Town Brook in Hingham and Smelt Brook in Weymouth, Mass. Loss of this habitat may adversely affect spawn-



Photo by Mark McInerney

**William Johnson, Hingham Fire Chief, presents his comments to the New England District.**

ing and anadromous fish runs for smelt herring and alewife.

The MBTA has developed a wetland mitigation plan to replace lost wetlands. The overall mitigation goal would be to provide mitigation to impact ratio of two to one.

Stenographers were available to attendees who wanted to make a statement, but did not want to speak. All comments, whether written or spoken at the hearing, will be given equal weight in the decision-making process.

The New England District accepted comments on the project until April 25.

A website on the Greenbush Permit Application has been established. For more information, please go to [www.nae.usace.army.mil/projects/ma/greenbush.htm](http://www.nae.usace.army.mil/projects/ma/greenbush.htm).

*For more information call the New England District Public Affairs Office at (978) 318-8777.*

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